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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,476	08/16/2001	Kazuo Ogino	330-239	9934

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EXAMINER

COLAIANNI, MICHAEL

ART UNIT PAPER NUMBER

1731

DATE MAILED: 02/06/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/930,476

Applicant(s)

Ogino et al.

Examiner
Michael Colaanni

Art Unit
1731



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Dec 17, 2002
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above, claim(s) 1-9 and 14-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s): _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 5,6 6) ☐ Other: _____

Art Unit: 1731

Election/Restriction

1. Applicant's election of Group I, Specie III, claims 10-13 in Paper No. 9 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 1-9, 14-18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species and invention, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 9.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 10-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 refers to “a glass raw material” in line 2 and “a raw material” in line 5 which is of confusing antecedent basis. It is not clear if the “a raw material” is part of the “a glass raw material” of line 2, or if it is a separate charge.

Art Unit: 1731

Claims 11 and 12 refer to “a glass raw material” which is of confusing antecedent basis with the “a glass raw material” in claim 10. It is not clear if the metaphosphate and the fluorine compound are part of the glass raw material charged to the furnace or are charged in a separate step.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Verhappen et al. 4019888 in view of Alexander 3997313.

Art Unit: 1731

Verhappen et al. teach a method for melting glass compositions by bubbling oxygen gas through the melt at the point where the batch is charged to the furnace (Fig. 1, ref. no. 31, 41, 47, 17).

However, Verhappen et al. do not explicitly teach that the method is practiced with phosphate glasses.

However, Alexander teaches that it is known to bubble oxygen through phosphate glasses during their production (col. 2, lines 20-24, col. 1, lines 63-66).

It would have been *prima facie* obvious at the time the invention was made to combine Alexander's teaching of using phosphate glasses with oxygen bubbling with Verhappen et al.'s method of bubbling oxygen into glass melts at the point where the batch is charged to the furnace because Verhappen et al. teach that any glass raw material composition may be used (col. 1, lines 55-63) and Alexander teaches that it is known to bubble oxygen through phosphate glass compositions (col. 2, lines 20-24, col. 1, lines 63-66).

8. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Verhappen et al. 4019888 in view of Alexander 3997313 and Broemer et al. 4857487.

Verhappen et al. in view of Alexander teach applicant's claimed invention. See the §103(a) rejection above for Verhappen et al. in view of Alexander's teachings. However, neither Verhappen nor Alexander teach using a metaphosphate or a fluorine compound in the glass raw material.

Art Unit: 1731

However, Broemer et al. teach that is known to use aluminum metaphosphate (col. 1, line 62) and fluorine compound (col. 1, lines 62-63) when making fluorophosphate glasses.

It would have been prima facie obvious at the time the invention was made to combine Broemer et al.'s teachings with Verhappen et al. in view of Alexander's method of melting glasses because the compounds used are known compounds for making fluorophosphate glass.

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Verhappen et al. 4019888 in view of Alexander 3997313 and Ogino 4983198.

Verhappen et al. in view of Alexander teach applicant's claimed invention. See the §103(a) rejection above for Verhappen et al. in view of Alexander's teachings. However, neither Verhappen nor Alexander teach the ratio of depth of glass to distance between charging port and liquid glass surface claimed in claim 13.

However, Ogino teaches that it is known that the distance between the charging port (Fig. 1, ref.no. 17) and the liquid glass surface (Fig. 1, ref. no. 12) is much smaller than the depth of the glass in the tank (Fig. 1, ref. no. 12, 5). It would be within the skill of one of ordinary skill in the art to design the depth to distance ratio according to the desired tank size given Ogino's teachings.

It would have been prima facie obvious at the time the invention was made to combine Ogino's teachings with Verhappen et al. in view of Alexander's method of melting glasses for the reasons given in the body of the rejection.

Art Unit: 1731

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Colaianni whose telephone number is 703-305-5493. The examiner can normally be reached on Monday to Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin, can be reached on (703) 308-1164. The fax phone number for the organization where this application or proceeding is assigned is 703-305-7115.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

A handwritten signature in black ink, appearing to read "Michael Colaianni". The signature is fluid and cursive, with the first name "Michael" and last name "Colaianni" clearly distinguishable.

Art Unit 1731
January 30, 2003

**MICHAEL COLAIANNI
PRIMARY EXAMINER**